

CLAIMS

1. A neovascularization inhibitor comprising the following polypeptide (a) or (b) as an active ingredient:

(a) a polypeptide having the amino acid sequence PyrGlu³² ~ Val⁴⁷⁸ of hepatocyte growth factor (HGF),

(b) a polypeptide having an amino acid sequence derived from the amino acid sequence defined in (a) by the deletion, substitution or addition of one or more amino acids and having antagonistic activity against the c-Met/HGF receptor-mediated action of HGF.

2. The neovascularization inhibitor according to Claim 1 wherein said polypeptide has at least one hairpin domain and 4 Kringle domains.

3. The neovascularization inhibitor according to Claim 1 wherein said polypeptide is one obtainable by elastase digestion of hepatocyte growth factor.

4. A neovascularization inhibitor comprising the polypeptide defined by SEQ ID NO: 1 and a pharmaceutically acceptable carrier.

5. A neovascularization inhibitor comprising the polypeptide defined by SEQ ID NO: 2 and a pharmaceutically acceptable carrier.

6. A prophylactic or therapeutic drug for a disease associated with abnormal angiopoiesis which comprises the polypeptide defined in Claim 1 and a pharmaceutically acceptable carrier.

7. The prophylactic or therapeutic drug according to Claim 6 wherein said disease associated with abnormal angiopoiesis is selected from the group consisting of rheumatoid arthritis, psoriasis, Osler-Webber syndrome, myocardial angiopoiesis, telangiectasia, hemophilic joint, angiogenic diseases of the eye, angiofibroma, benign tumors and wound granulation.

8. A prophylactic or therapeutic drug for a disease arising from over stimulation of endothelial cells which comprises the polypeptide defined in claim 1 and a pharmaceutically acceptable carrier.

9. The prophylactic or therapeutic drug according to Claim 8 wherein said disease arising from over stimulation of endothelial cells is selected from the group consisting of enteric adhesion, Crohn's disease, atherosclerosis, scleroderma and over cicatrization.

10. A conception-regulating drug comprising the polypeptide defined in Claim 1 and a pharmaceutically acceptable carrier.

11. A method of inhibiting neovascularization which comprises administering to a subject a neovascularization inhibitor comprising the following polypeptide (a) or (b) and a pharmaceutically acceptable carrier:

(a) a polypeptide having the amino acid sequence PyrGlu³² ~ Val⁴⁷⁸ of hepatocyte growth factor (HGF).

(b) a polypeptide having an amino acid sequence derived from the amino acid sequence defined in (a) by the deletion, substitution or addition of one or more amino acids and having antagonistic activity against the c-Met/HGF receptor-mediated action of HGF.

12. A method for prophylaxis or therapy of a disease associated with abnormal angiogenesis which comprises administering a neovascularization inhibitor comprising the following polypeptide (a) or (b) and a pharmaceutically acceptable carrier:

(a) a polypeptide having the amino acid sequence PyrGlu³² ~ Val⁴⁷⁸ of hepatocyte growth factor (HGF).

(b) a polypeptide having an amino acid sequence derived from the amino acid sequence defined in (a) by the deletion, substitution or addition of one or more amino acids and having antagonistic activity against the c-Met/HGF receptor-mediated action of HGF to a subject in whom a prophylactic or therapeutic treatment for said disease is indicated.

13. The method for prophylaxis or therapy according to Claim 12 wherein said disease is any disease selected from the group consisting of rheumatoid arthritis, psoriasis, Osler-Webber syndrome, myocardial angiogenesis, telangiectasia, hemophilic joint, angiogenic diseases of the eye, angiofibroma, benign tumors, wound granulation, enteric adhesion, Crohn's disease, atherosclerosis, scleroderma and over cicatrization.

14. Use of the following polypeptide (a) or (b) for the production of a neovascularization inhibitor:

(a) a polypeptide having the amino acid sequence PyrGlu³² ~ Val⁴⁷⁸ of hepatocyte growth factor (HGF).

(b) a polypeptide having an amino acid sequence derived from the amino acid sequence defined in (a) by the deletion, substitution or addition of one or more amino acids and having antagonistic activity against the c-Met/HGF receptor-mediated action of HGF.